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be in a pump at the same location. The flowing pressure at the apex, plus the liquid head in the sump, provide a pump suction pressure exceeding the minimum NPSH required, thus eliminating the risk of cavitation in the bottom pump.

IN THE DRAWINGS

Pursuant to the condition of the Decision of this Office dated October 8, 1999, granting Applicant's Petition for the original filing date, please cancel Figs. 3 and 6 of the drawings from this application, as shown in Figs 3 and 6 in the attached Request for Approval of Drawing Changes in which the figures are enclosed within brackets (in red in the attached drawing) and identified as "CANCELED" (again in red). By these changes to Figs. 3 and 6, Applicant does not intend to cancel Figs. 3a, 3b, 3c, 6a, or 6b.

*Amended  
7/10/02  
LJG*

Also, please amend Figs. 4 and 10 as indicated in the attached Request for Approval of Drawing Changes.

IN THE CLAIMS:

Please cancel claims 1-7. Add new application claims 8-78.

8. A method of forming a second borehole from a first borehole comprising the steps of:

installing a casing in at least a portion of the first borehole,  
underreaming a portion of the first borehole at the location of the second borehole to be formed;

running a joint assembly through the casing in the first borehole and installing the assembly at the under-reamed portion of the first borehole, said assembly including at least one

expandable portion to serve as a guide for drilling the second borehole when in an expanded

state;

expanding the expandable portion of the joint assembly outward into the under-reamed  
portion of the first borehole;

applying settable material into the under-reamed portion and about at least the expanded  
portion of the joint assembly; and

drilling a second borehole along the expandable portion, when in the expanded state.

9. The method of claim 8 wherein the joint assembly includes a first tubular portion  
from which the expandable portion extends when placed in the expanded state and wherein  
during the steps of applying settable material, settable material is applied about the intersection  
of the first tubular portion and the expandable portion.

10. The method of claim 9 wherein a seal interface is provided between the first  
tubular portion and the expandable portion when in the expanded state.

11. The method of claim 8 wherein the step of under-reaming a portion of the first  
borehole includes removing a portion of the casing.

12. The method of claim 8 further comprising the step of hanging the joint assembly  
from the casing of the first borehole.

13. The method of claim 12 wherein the joint assembly is connected to the casing  
above the under-reamed portion of the first borehole.

14. The method of claim 12 wherein the joint assembly is fastened to the casing above  
and below the joint assembly.

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15. The method of claim 12 wherein a seal is formed at the intersection of the joint assembly and the casing.

16. The method of claim 8 wherein the expandable portion, when expanded, forms a pressure tight seal with the remaining portion of the joint assembly.

17. The method of claim 8 wherein the expandable portion, when expanded, is oriented at a preselected kick-off angle for the second borehole.

18. The method of claim 8 wherein the expandable portion is supported during run in by a portion of the joint assembly.

19. The method of claim 8 wherein the expandable portion is guided during its outward expansion by a portion of the joint assembly.

20. The method of claim 8 wherein said expandable portion is a generally tubular member when in the expanded state.

21. The method of claim 8 wherein the expandable portion is sufficiently rigid, when expanded, to support and direct a drilling tool.

22. The method of claim 8 wherein after the expandable portion is expanded, the joint assembly provides two downwardly directed members through which two different boreholes may extend.

23. The method of claim 22 wherein each of the downwardly directed members is generally cylindrical in shape.

24. The method of claim 8 wherein an inflatable bladder covers the joint assembly and further comprising the step of filling the inflatable bladder with settable material when the

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joint assembly is in the under-reamed portion of the first borehole, the settable material urging the bladder against the walls of the under-reamed portion of the first borehole.

25. The method of claim 8 further comprising the step of injecting steam into at least one of said first and second boreholes and producing oil from one or both of said boreholes.

26. The method of claim 8, further comprising clearing the joint assembly to its full bore opening to provide access for tools into the second borehole.

27. The method of claim 8 further comprising the step of running in a liner assembly through the expandable portion, when expanded, and into the drilled second borehole.

28. The method of claim 27 further comprising the step of hanging the liner assembly from the joint assembly, to complete the well.

29. The method of claim 28 further comprising the step of hanging the liner assembly from the expandable portion of the joint assembly.

30. The method of claim 27 further comprising the step of cementing the liner assembly in the second borehole.

31. The method of claim 27 further comprising the step of connecting a completion tubing in a sealed relationship with the liner assembly.

32. A method of forming a second borehole from a first borehole having casing along at least a portion of its length comprising the steps of:

under-reaming a portion of the first borehole;

running a joint assembly through the casing in the first borehole and installing the assembly at the under-reamed portion of the first borehole, said assembly including at least one

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expandable member adapted to pass along with said assembly through the casing in the first borehole in an unexpanded state and adapted to be expanded into the under-reamed portion, said expandable member serving as a guide for drilling the second borehole when in the expanded state;

causing the expandable member of the joint assembly to expand outwardly into the under-reamed portion;

applying settable material into the under-reamed portion and about at least a portion of the expandable member; and

drilling a second borehole through the joint assembly and along the expanded member.

33. The method of claim 32 wherein the joint assembly includes a first tubular portion from which the expandable member extends when placed in the expanded state and wherein during the steps of applying settable material, settable material is applied about the intersection of the first tubular portion and the expandable member, when in the expanded state.

34. The method of claim 33 wherein a seal interface is provided between the first tubular portion and the expandable member.

35. The method of claim 32 wherein the step of under-reaming a portion of the first borehole includes removing a portion of the casing.

36. The method of claim 32 further comprising the step of hanging the joint assembly from the casing of the first borehole.

37. The method of claim 36 wherein the joint assembly is connected to the casing above the under-reamed portion of the first borehole.

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38. The method of claim 36 wherein the joint assembly is fastened to the casing above and below the joint assembly.

39. The method of claim 38 wherein a seal is formed at the intersection of the joint assembly and the casing.

40. The method of claim 32 wherein the expandable member, when expanded, forms a pressure tight seal with the remaining portion of the joint assembly.

41. The method of claim 32 wherein the expandable member, when expanded, is oriented at a preselected kick-off angle for the second borehole.

42. The method of claim 32 wherein the expandable member is supported during run in by a portion of the joint assembly.

43. The method of claim 32 wherein the expandable member is guided during its outward extension by a portion of the joint assembly.

44. The method of claim 32 wherein said expandable member is a generally tubular member when in the expanded state.

45. The method of claim 32 wherein the expandable member is sufficiently rigid, when expanded, to support and direct a drilling tool.

46. The method of claim 32 wherein after the expandable member is expanded, the joint assembly provides two downwardly directed members through which two different boreholes may extend.

47. The method of claim 46 wherein each of the downwardly directed members is generally cylindrical in shape.

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48. The method of claim 32 wherein an inflatable bladder covers the joint assembly and further comprising the step of filling the inflatable bladder with settable material when the joint assembly is in the under-reamed portion of the first borehole, the settable material urging the bladder against the walls of the under-reamed portion of the first borehole.

49. The method of claim 32 further comprising the step of injecting steam into at least one of said first and second boreholes and producing oil from one or both of said boreholes.

50. The method of claim 32, further comprising clearing the joint assembly to its full bore opening to provide access for tools into the second borehole.

51. The method of claim 32 further comprising the step of running in a liner assembly through the expandable member, when expanded, and into the drilled second borehole.

52. The method of claim 51 further comprising the step of hanging the liner assembly from the joint assembly to complete the well.

53. The method of claim 52 further comprising the step of hanging the liner assembly from the expandable member of the joint assembly.

54. The method of claim 51 further comprising the step of cementing the liner assembly in the second borehole.

55. The method of claim 51 further comprising the step of connecting a completion tubing in a sealed relationship with the liner assembly.

56. A method of forming a second borehole from a first borehole having casing along at least a portion of its length comprising the steps of:

under-reaming a portion of the first borehole;

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running a joint assembly through the casing in the first borehole and installing the assembly at the under-reamed portion of the first borehole, said assembly including an expandable portion, the expandable portion passing with the joint assembly through the casing in the first borehole in an unexpanded state and being extendable to an expanded state in the under-reamed portion, the expandable portion being sufficiently rigid when in the expanded state for supporting and guiding a tool for drilling the second borehole;

expanding the expandable portion of the joint assembly outwardly into the under-reamed portion;

applying settable material into the under-reamed portion and about at least the expandable portion of the joint assembly; and

drilling a second borehole through the joint assembly and along the expandable portion, when in the expanded state.

57. The method of claim 56 wherein the joint assembly includes a first tubular portion from which the expandable portion extends when placed in the expanded state and wherein during the steps of applying settable material, settable material is applied about the intersection of the first tubular portion and the expanded portion.

58. The method of claim 57 wherein a seal interface is provided between the first tubular portion and the expandable portion, when in the expanded state.

59. The method of claim 56 wherein the step of under-reaming a portion of the first borehole includes removing a portion of the casing.

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60. The method of claim 56 further comprising the step of hanging the joint assembly from the casing of the first borehole.
61. The method of claim 60 wherein the joint assembly is connected to the casing above the under-reamed portion of the first borehole.
62. The method of claim 60 wherein the joint assembly is fastened to the casing above and below the joint assembly.
63. The method of claim 60 wherein a seal is formed at the intersection of the joint assembly and the casing.
64. The method of claim 56 wherein the expandable portion, when expanded, forms a pressure tight seal with the remaining portion of the joint assembly.
65. The method of claim 56 wherein the expandable portion, when expanded, is oriented at a preselected kick-off angle for the second borehole.
66. The method of claim 56 wherein the expandable portion is supported during run in by a portion of the joint assembly.
67. The method of claim 56 wherein the expandable portion is guided during its outward expansion by a portion of the joint assembly.
68. The method of claim 56 wherein said expandable portion is a generally tubular member when in the expanded state.
69. The method of claim 56 wherein after the expandable portion is expanded, the joint assembly provides two downwardly directed members through which two different boreholes may extend.

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70. The method of claim 69 wherein each of the downwardly directed members is generally cylindrical in shape.
71. The method of claim 56 wherein an inflatable bladder covers the joint assembly and further comprising the step of filling the inflatable bladder with settable material when the joint assembly is in the under-reamed portion of the first borehole, the settable material urging the bladder against the walls of the under-reamed portion of the first borehole.
72. The method of claim 56 further comprising the step of injecting steam into at least one of said first and second boreholes and producing oil from one or both of said boreholes.
73. The method of claim 56, further comprising clearing the joint assembly to its full bore opening to provide access for tools into the second borehole.
74. The method of claim 56 further comprising the step of running in a liner assembly through the expandable portion, when expanded, and into the drilled second borehole.
75. The method of claim 74 further comprising the step of hanging the liner assembly from the joint assembly to complete the well.
76. The method of claim 75 further comprising the step of hanging the liner assembly from the expandable portion of the joint assembly.
77. The method of claim 74 further comprising the step of cementing the liner assembly in the second borehole.
78. The method of claim 74 further comprising the step of connecting a completion tubing in a sealed relationship with the liner assembly.